Sketchnote summary of “The backscattering story: A personal view”

Robert Dimeo

Director, NIST Center for Neutron Research, 100 Bureau Drive, MS 6100, Gaithersburg, MD 20899-6100, USA
E-mail: robert.dimeo@nist.gov

Abstract. In August 2014, Dr. Anton Heidemann published a short, personal history of the development of neutron backscattering. His fascinating article (http://tinyurl.com/hahuja4) described the technical innovations that were made during the development of this technique, and it is supplemented with numerous engaging and endearing anecdotes that give life to this history. This sketchnote summary attempts to capture a flavor of those developments and anecdotes through a series of simple illustrations presented in a sequential visual format. This sketchnote was presented to Dr. Heidemann at the conference “50 Years of Neutron Backscattering” held in Garching September 2–3, 2016.

Keywords: Neutron scattering, neutron spectroscopy, backscattering, sketchnotes
THE BACKSCATTERING STORY
A PERSONAL VIEW

1970 BSS DISMANTLED
1969 TRANS. FINSIH THEIR THESSES

FIRST MEASUREMENTS
V. Spectrum - 10 days
S 500 - 1 100-0.2 MeV
Ar, O
4O

BSS INSTRUMENT
First
Disk catcher to separate incident & scattered neutrons

JULICH 1970-1972
COMMISSIONED PI-SPECTROMETER
Temporarily Dornier plane
100 A flux of spallation BSS
PK, Stil reflector, faulty PM analyzer

"TT" SPECTROMETER
$20 = 10$ K40s
$11 \ A \rightarrow 21 \ A$

THE → GΗΖ
...opening new domains in neutron spectroscopy

THE DEVELOPMENT OF A NEW METHOD, WHENEVER ITS PRECISION, SENSITIVITY OR RESOLUTION IS MUCH BETTER THAN EVERYTHING THAT EXISTED IN THIS FIELD BEFORE, CREATES NEW PHYSICS

R. Dimeo / Sketchnote summary of “The backscattering story: A personal view”